

CATALYST REGENERATION

5

Abstract of the Disclosure

There is provided a process for regenerating the activity of used metal catalysts for the hydrogenation of carbon monoxide comprising decreasing the hydrocarbon content thereof, calcining under an oxidant-containing atmosphere, impregnating with a solution of at least one of a metal compound, calcining under an oxidant-containing atmosphere and activating by contacting with a hydrogen-contacting gas at elevated temperatures to form an active catalyst. The process regenerates and enhances both supported and dispersed active metal (DAM) catalysts. Used catalysts enhanced by the process are initially treated to decrease their hydrocarbon content. The treatment may be carried out in a single reactor, or by carrying out up to all steps after catalyst may be withdrawn from a reactor and returned to at least one reactor, both preferably during operation thereof. Up to all steps may be effected in a subsequent reactor, or in specialized apparatus.